PSFSS COMMITTEE: 06/19/14
ITEM: (d) (3)

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: **PUBLIC SAFETY, FINANCE AND STRATEGIC SUPPORT COMMITTEE**

FROM: Ruben Torres

SUBJECT: **SAN JOSE FIRE DEPARTMENT RESPONSE TIMES ANALYSIS AND ACTION PLAN**

DATE: June 6, 2014

Approved [signature] Date 6-11-14

INFORMATION

The purpose of this memorandum is to inform the Public Safety & Strategic Support Committee of 1) Actions that have been taken to improve response times; 2) Future actions that will be implemented by the Fire Department to further improve response time performance to the community; and 3) the elements of the Performance Measure Project Plan that will enable a sustainable data/analytics program going forward.

BACKGROUND

As noted in a March 14, 2014, memorandum to the City Council, the Fire Department discovered that due to an incorrect application of the reporting methodology to the data captured from the Computer Aided Dispatch (CAD) and Firehouse Record Management System, the information provided to the County prior to November 2013, was incorrect; but since February 2012, data have been correctly entered in the City's CAD system, however, the reporting methodology had not been consistent with the County contract until November 2013.

As noted in that same memorandum, the Fire Department formed a working group charged with analyzing the accuracy of the information and the source of the information used to report response times. The working group has since completed a thorough analysis and validation of the Fire Department's response times including segmenting and quantifying response time problems.

Please note that on Friday, May 9, 2014 a comprehensive report was delivered to the Mayor and City Council at the 2014-2015 Budget Study Session that included historical response time data from July 2012 through April 2014.

ACTIONS TAKEN

In an effort to maximize performance within each segment of the response time continuum (Dispatch Time, Turnout Time, and Travel Time) the Department has taken the following actions:

On March 17, 2014 the department adopted "early dispatch" procedures for EMS responses. The change eliminated "station pre-alerts," with unit dispatch occurring prior to call triage and immediately upon determination of EMS call type and address. All EMS dispatches became code-3 responses until completion of triage. The expected outcome was improved dispatch time.

On March 17, 2014 the department altered the dispatch sequence and response area for Squads. Squad dispatches were amended to first due only with their parent company until triage determined appropriate unit. The expected outcome was improved dispatch time.

In mid-2013, the department reduced the number of companies that could be placed out of service for training purposes from 5 to 3. The expected outcome was improved travel time.

In mid-2013, the department employed decentralized training in order to reduce out of service time for travel to and from training exercises. The expected outcome was improved travel time.

In mid-2013 the department provided training on incident reporting. The result was improved data accuracy and availability.

As of May 25, 2014, Engine 29 is no longer subject to brownout. The expected outcome is improved travel time.

As of June 8, 2014, Engine 29 and Engine 25 will be relocated to their respective home stations, co-locating the Hazardous Incident Team (HIT) companies. Station 25 will no longer be vacated for HIT responses and HIT training. The expected outcome is improved travel time.

Within 3 months, the department will develop a Labor/Management Initiative (LMI) committee to evaluate the current turnout time standard and develop a pilot study to identify challenges and possible areas of improvement.

The Department is undergoing a current initiative to further improve Turnout Time performance.

FUTURE ACTIONS

The Fire Department is committed to improving response times and specifically to improving Travel Time performance. To that end, in addition to the actions outlined above, the Department is moving forward with the following initiatives:

1. Evaluating Automatic Vehicle Location ("AVL") closest unit dispatch feasibility and efficacy.
2. Continuing to evaluate options for expanded Signal Preemption capability.
3. Developing a Standards of Coverage document that will assist with an intelligent growth strategy for the department.
4. Performing additional GIS/heat mapping analysis to help further identify difficult to serve response areas, call volume, population density and demand by service area.

5. Evaluating of Emergency Service Zones ("ESZ") to determine whether they are rural or suburban which affects response time standards for the County EMS contract.
6. Further analyzing late responses with regard to first due apparatus late responses vs. second due apparatus late responses and determining the causes.
7. Closest Unit Dispatch - the desired outcome of this work will allow Customer agencies to use Closest Units within their geographic boundaries (except ambulance that has no boundaries) prior to outside agencies crossing boundaries.
8. Implementing a Data Automation Work Plan to enable the process of continuing to report response time performance on a near real time basis.
9. Evaluation of the Squad Pilot Program.

DATA AUTOMATION PROJECT PLAN

The final element of this update is to provide the Data Automation Project Plan outline (see below), which is currently in development.

San Jose Fire Department PM Project

Phase 1

1 **Add 3 custom columns to event type**
1.1 Fire Department Code of Response (example values: Code 2, Code 3)
1.2 Incident Category (example values: MEDICAL, FIRE, OTHER)
1.3 Reporting Priority (example values: 1, 2, 3, 4) – This is different from the Priority field that currently exists in CAD.

Custom Field with Shape file
1.4 The ability to identify the Fire Department jurisdiction for each event in a dedicated field.
1.5 Identify Population Density (Urban, Suburban and Rural areas).

2 **Automatic record of En-route and On-scene : Intergraph's Halo status recoding**
Intergraph can enable this feature to record En-route, On scene etc., using AVL. Allows for identifying status changes as they are made in the server.

3 Preempt Bug Fix.

4 Cancelled Unit recorded as Unit Status in unit table.

Phase 2

During this phase, build a Data Warehouse house **outside** of the CAD environment supported by a dedicated report server.

5 Acquiring hardware software for Data Warehouse.

6 Acquiring Report Server hardware and software.

7 ETL (Extract, Transform, Load) setup for the following
9.1 CAD Data
9.2 FireHouse
9.3 TeleStaff

Phase 3

8 Develop Business Intelligence (BI) reports
9 Enable Consistent Management Reports
10 Create Dashboards

CONCLUSION

$220,000 has been identified in the 2014/2015 Budget to be dedicated to the data automation project. The addition of a Senior Geographic Systems Specialist has also been recommended. As the project continues, the Department will be analyzing the resources required to ensure a sustainable program that produces accurate, actionable data for management and personnel.

The Department will return to the Committee in November with updates regarding the impact of actions taken (current response time performance) and resource recommendations.

/s/

RUBEN TORRES, INTERIM FIRE CHIEF
San José Fire Department

For additional information, please contact Ron D'Acchioli, Deputy Director, Bureau of Administrative Services, San José Fire Department at 408-794-6953.